



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,510	03/31/2006	Ngoc Anh Le	14507-48860	9967
24728 7590 06/26/2008 MORRIS MANNING MARTIN LLP 3343 PEACHTREE ROAD, NE 1600 ATLANTA FINANCIAL CENTER ATLANTA, GA 30326				
EXAMINER CHEU, CHANGHWAI				
ART UNIT		PAPER NUMBER		
1641				
MAIL DATE		DELIVERY MODE		
06/26/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/527,510

Applicant(s)

LE ET AL.

Examiner

JACOB CHEU

Art Unit

1641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-63 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-12, 44-49, drawn to a method of diagnosing and monitoring the progression of an vascular disease, with the special technical feature measuring antibodies against an oxidatively damaged lipoprotein and correlating the amount of the antibodies with the severity of the vascular diseases.

Group II, claim(s) 13-22, 30-40, drawn to a method of monitoring the progression of vascular disease treatment in a living subject, with special technical feature of measuring the lipid oxidation products in blood and correlating the amount of the lipid oxidation products with the success or failures of the vascular treatment.

Group III, claim(s) 23-29, drawn to a method of monitoring the degree of oxidative stress in a living subject, with special technical feature of measuring the lipid oxidation products in blood and correlating the amount of the lipid oxidation products with the degree with oxidative stress.

Group IV, claim(s) 41-43, drawn to a method of monitoring the degree of endothelial inflammation in a living subject, with special technical feature of measuring the lipid oxidation products in blood and correlating the amount of the lipid oxidation products with the degree of endothelial inflammation.

Group V, claim(s) 50-52, drawn to a method of diagnosing and monitoring of a cardiovascular disease in a living subject, with special technical feature of measuring the lipid oxidation

products in blood and correlating the amount of the lipid oxidation products with the severity of the cardiovascular disease.

Group VI, claim(s) 53-63, drawn to a method of determining the state of endothelial dysfunction in a living subject, with special technical feature of measuring the lipid oxidation products in blood and endogenous circulating antibodies against the oxidatively damaged lipoprotein and correlating the amounts of the lipid oxidation products and the antibodies with the state of endothelial dysfunction.

2. The inventions listed as Groups I-VI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

With respect to group III, Le et al. teach a method of monitoring the degree of oxidative stress in a living subject (See Le et al. *Metabolism* 2000 Vol. 49, page 1271-1277; Note, this paper are Applicant's own paper). Le et al. teach administering a polyunsaturated fatty acid (i.e. Lipomul containing polyunsaturated fatty acid) to cardiovascular patients and measuring the amount of lipid oxidation products (e.g. malondialdehyde-modified low density lipoprotein; MDA-LDL) by ELISA and correlating the amount of lipid oxidative products with the degree of oxidative stress (See page 1272, right column, "Oral Fat load Protocol" and left column for "ELISA for Abs against MDA-LDL; also page 1276, left column, third paragraph). The core feature linked to all groups are administering polyunsaturated fatty acid, measuring the amount of lipid oxidative products and correlating the amount of lipid oxidative product with various phenotype, such as severity of cardiovascular disease, degree of inflammation or oxidative stress, or state of endothelial dysfunction. Since Le et al. disclose the main feature and each group has special technical feature(s) not required by other groups, the instant invention does not contribute novelty or inventive step under PCT Rule 13.1 and 13.2.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JACOB CHEU whose telephone number is (571)272-0814. The examiner can normally be reached on 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jacob Cheu/
Examiner, Art Unit 1641